

Abstract of the Disclosure

5 This invention relates to the identification of homologs of atrazine chlorohydrolase and the use of these homologs to degrade *s*-triazine-containing compounds. In particular, this invention includes the identification of homologs of atrazine chlorohydrolase encoded by a DNA fragment having at least 95% homology to the sequence from the nucleic acid sequence beginning at position 10 236 and ending at position 1655 of SEQ ID NO:1, where the DNA fragment is capable of hybridizing under stringent conditions to SEQ ID NO:1 and has altered catalytic activity as compared with wild-type atrazine chlorohydrolase.